BI plans for Hilumi

Beam position monitors
Two systems - today

• DOROS - only for orbit (acquisition rate @ 1Hz)

• WBTN – bunch-by-bunch acquisition (40MHz)

• In preparation for renovation of Interlock BPM
  • Bunch-by-bunch system (digitizing at 3GSa/s for doublet beams)
In the future..

• DOROS
  • Faster orbit acquisition at 25Hz to be compatible with Orbit feedback
  • Turn by Turn acquisition
  • No bunch by bunch possible!

• New bunch-by-bunch acquisition (40MHz)
  • new WBTN worth re-designing for LS3 – how much do we gain compared?
    • Seems difficult to measure doublet using this technique

• Rad-tolerant system with fast digitalization